

In the Claims:

No amendments to the claims are presented.

1. (Previously presented) A composite substrate comprising:
a carrier composed of a carrier material, the carrier having a surface and pillar extensions that extend from the surface, the pillar extensions having rounded corners that meet the surface of the carrier, the rounded corners forming a gradual interface between sidewalls of the pillar extensions and the surface of the carrier;
a first layer composed of a first material having a dilatation behavior that is substantially the same as that of the carrier material; and
an intermediate layer composed of a second material being located between the carrier and the first layer, the second material having a dilatation mismatch with the first material, the intermediate layer having pillar structures of the second material, each extending from one of the pillar extensions to a surface of the first layer, and arranged for absorbing stress originating from the dilatation mismatch, and wherein the rounded corners of the pillar extensions reduce stress originating from the dilatation mismatch.
2. (Original) A composite substrate according to claim 1, wherein the intermediate layer has a thickness, and the structures extend through the thickness of the intermediate layer.
3. (Previously presented) A composite substrate according to claim 1, wherein the pillar structures are separated by open spaces that extend from the surface of the carrier to the surface of the first layer.
4. (Original) A composite substrate according to claim 1, wherein the carrier material is the same as the first material.
5. (Previously Presented) A composite substrate according to claim 1, wherein the carrier material and the first material are semiconductors.

6. (Previously Presented) A composite substrate according to claim 1, wherein the second material is an electrically insulating material.
7. (Previously presented) A composite substrate according to claim 1, wherein the intermediate layer lies in a plane, and wherein the dimensions of the structures in the plane of the intermediate layer are less than a centimeter.
8. (Previously Presented) A composite substrate according to claim 1, wherein the carrier lies in a plane and wherein the structures have a line-symmetric shape in a cross-section perpendicular to the plane of the carrier.
9. (Previously Presented) A composite substrate according to claim 1, wherein the carrier lies in a plane and wherein the structures have a circular, square, rectangular or rhombic shape in a cross-section parallel to the plane of the carrier.
10. (Previously Presented) A composite substrate according to claim 1, wherein the composite substrate is a silicon-on-insulator wafer.
- 11-20. (Cancelled).
21. (Previously Presented) A composite substrate according to claim 1, wherein the first layer is bonded to the intermediate layer.
22. (Previously presented) A composite substrate according to claim 1, wherein the carrier material is a semiconductor and the second material is composed of an oxide of the semiconductor.
23. (Previously Presented) A composite substrate according to claim 1, wherein the structures are formed integrally with the carrier layer.

24. (Previously presented) A composite substrate according to claim 1, wherein the second material is thermally oxidized semiconductor material.
25. (Previously Presented) A composite substrate according to claim 1, wherein each of the structures has a free surface arranged so that dislocations that form in the structures due to the stress originating from the dilatation mismatch move to and disappear from the free surface.
26. (Previously Presented) A composite substrate according to claim 1, wherein the structures are included at selected locations of the intermediate layer.
27. (Previously presented) A composite substrate according to claim 1, wherein the pillar structures each have a diameter of between 10 μm and 10 nm.
28. (Previously presented) A composite substrate according to claim 1, wherein the first layer includes a device layer.